CONTROL DATA INSTITUTES

TRAIN FOR TOMORROW

IN THE COMPUTER INDUSTRY

TO MEN AND WOMEN

CONSIDERING

A

NEW CAREER

A new and direct route is now open to you for entering the most dynamic field of opportunity in our country today. The field is the computer industry, and the direct route to it for young men and women like you is training at Control Data Institutes.

Behind the success of each computer installation are men and women with advanced training in the fields of Computer Technology, Programming Technology and Electro-Mechanical Drafting.

Control Data Institutes, with schools located in Los Angeles, Minneapolis, and Washington, D.C., were established for the specialized training of technicians for the computer industry. As General Manager of this Division of Control Data Corporation, may I congratulate you on the interest you are expressing in this challenging area.

It will be a pleasure for me if eventually we meet in your pursuit of a career full of opportunity and challenge. Meanwhile, I want to wish you success in whatever career you select.

Very truly yours,

CONTROL DATA INSTITUTES

Swen A. Larsen
General Manager

For Additional Information Contact:

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THE COMPUTER INDUSTRY

Computers make news. Most people today are aware of the remarkable contribution that computers are making to science, industry, commerce and government. Scarcely a week goes by without computers making news in some new area of accomplishment.

Computers speed communications, diagnose our diseases, predict our weather, influence the management of commerce and industry. Without the ground-support computer, man could never have entered space. Computers are the essential element of today's and tomorrow's better life.

Before 1950 the computer industry didn't even exist. Today more than 35,000 computer systems are in operation in this country alone. Employment in the computer industry has increased from almost nothing in 1950 to more than a quarter million people . . . and the rate of growth continues to increase.

Growth like this spells career opportunity. The phenomenal growth of the industry has created an acute shortage of trained and qualified technicians.

Control Data 3000 Series Computing System

ABOUT CONTROL DATA

Control Data Institute is a training arm of Control Data Corporation. It is exclusively devoted to training qualified people for careers in computers—their use and development. Behind every Institute program stands the skill and experience of more than 10,000 Control Data employees who design, build, program and maintain the world's most powerful electronic computer systems.

In Australia, Greenland, India—and throughout the free world—you can find Control Data computers and Control Data people. The knowledge and proven ability represented in this world-wide experience is richly contained in all the Institute's personnel and programs.

The excellence that rocketed Control Data from a half dozen employees to more than ten thousand in nine years is fully reflected in the superiority of each of our computer career opportunities.

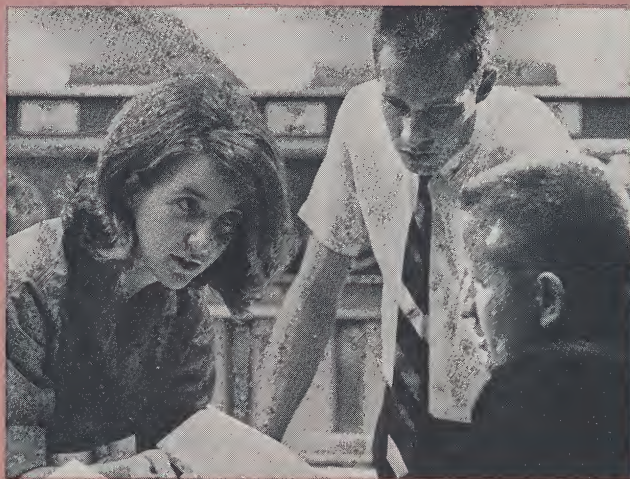

Computer Technicians in Training

COURSES OFFERED

Control Data Institute offers training to prepare you for an exciting computer career in the following fields:

■ **COMPUTER TECHNICIAN** He is the man who knows how computers work. How to keep them working. He works with the engineers who design them, helps assemble them, installs them, and maintains them. He is a highly skilled specialist in computers and electronics.

■ **ELECTRO-MECHANICAL DRAFTSMAN** This is the man or woman who backs up the engineer and designer. It is his or her job to translate their rough ideas into plans, drawings, blueprints—for others to follow in building, using, and maintaining computers and other electronic equipment. This job combines the skills of draftsman and electronic specialist.

■ **PROGRAMMER TECHNICIAN** This is the man or woman who translates human language into a language that the computer can understand. He or she works closely with the Systems Analyst in designing programs which direct the computer to perform specific tasks.

Computer Technicians at Work

DETAILS YOU'LL WANT TO KNOW:

Payment of Tuition and Fees: Registration fees are due and payable at the time your registration is accepted. Incidental fees are payable on or before the first day of class. Each month's tuition is payable in advance beginning with the first day of class. In the event that a student's enrollment is terminated for any reason, fees and tuition prepaid beyond the month in which the termination occurs will be refunded with the exception of the $15.00 registration fee.

Part-Time Employment: The concentration of the courses into two schedules — morning and afternoon — permits you to earn the major portion of your expenses with part-time work during the other hours of the day. Control Data Institute will assist students in finding part-time employment.

Fellowships: Tuition-free fellowships are awarded to outstanding students whose academic performance deserves recognition. All students are eligible to compete for them upon completion of their second month of active enrollment.

Student Loans: Student loan plans are available to qualified students.

Entrance Requirements: The standard minimum requirement is a high school education or its equivalent. Exceptions can be made in the case of applicants with sufficient related work experience.

Placement Bureau: Control Data Institute maintains a permanent placement bureau for its graduates at no cost. Some of the firms which express interest in hiring graduates of Control Data Institutes are Burroughs Corp., Continental Device Corporation, Control Data Corporation, Honeywell Incorporated, IBM, ITT Gilfillan Incorporated, 3 M Company, Motorola Incorporated, Lockheed Missiles and Space Company, etc.

FACULTY AND EQUIPMENT are what make Control Data Institute courses outstanding. It is a dedication to excellence plus the resources and willingness to provide all the tools necessary that make training at the Institutes such a rewarding experience.

Control Data Institutes' faculty members combine proven ability as technical instructors, with extensive and successful careers as engineers, programmers, designers and technicians. In addition, the Institutes draw upon the eminence and skill of the full engineering staff of Control Data Corporation.

We feel that no student can be any better than the tools he uses. Therefore, the Institute is pledged to provide only the most modern and the best. Students have two complete computer installations at their disposal, plus several other laboratories with hundreds of pieces of specialized equipment. This equipment is used exclusively for training within the Institute.

Until now, there have been few — if any — schools that have offered a curriculum to prepare technicians for direct entry into all of these three fields. Using the imaginative approach that built the world's most powerful computers, Control Data has changed all this by offering three separate courses for people interested in computer careers.
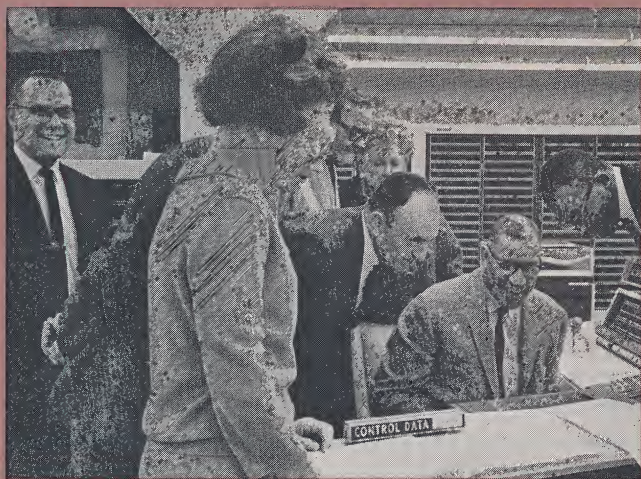
Control Data Institute Computer Laboratory

COMPUTER TECHNICIAN

This course features 1,000 hours of classroom and laboratory training. The curriculum begins directly with basic electronics, then moves briskly into the most modern of solid state computers and peripheral equipment.

Basic topics covered include: Mathematics; elements of electronic theory; direct current circuits; alternating current circuits; motors and generators; vacuum tube circuits; transistors; introduction to computer programming; planning the programming problem; program coding methods; basic computer logic; control signals and timing circuits; input/output circuits; computer trouble shooting; and such equipment as complete computer systems, magnetic tape transports, card punches, card readers, high speed line printers, disc files, data display units, console typewriters, paper tape readers and paper tape punches.

Individual computer systems, peripheral equipment laboratories and training aids designed specifically for computer technology are located within the school. This equipment assures students that they will receive the necessary "hands on time" so vital for true understanding of computer operation and maintenance.

Tuition and Fees (1,000 Hours)

Tuition	$1,600.00
Incidental Fee	135.00
Registration Fee	15.00
Total	$1,750.00

PROGRAMMER TECHNICIAN

This course features 500 hours of classroom and laboratory training in programming and operating digital computers.

Basic topics covered in the course include: general computer concepts; computer mathematics (binary, octal, and hexadecimal systems); console and full peripheral equipment; machine language programming; applications, compilers, FORTRAN, COBOL, and other languages; assemblers including Scope, Monitor and Compass.

An important and integral part of the approach to programmer training will be the opportunity for students to acquire "hands on" experience with computers and their related peripheral equipment. Students will have at their disposal two complete computer systems. These systems, both located on premises are exclusively reserved for student use. Thus, students will be able to write their own programs, prepare them for computer processing, and then actually run them on the computers. Programming projects assigned to students will be carefully selected to provide a well-rounded background of experience in all types of programming and equipment usage problems normally encountered.

Tuition and Fees (500 Hours)

Tuition	$800.00
Incidental Fee	60.00
Registration Fee	15.00
Total	$875.00

ELECTRO-MECHANICAL DRAFTING

This course features 500 hours of combined study and practice in basic electronics and drafting.

Basic topics covered in the course include: Basic drafting skills; shape description techniques; drafting mathematics; drawing materials and media; dimensioning and tolerancing; reproduction and storage; documentation; standard symbology; graphs and diagrams; written communication; electronic computer theory; production methods; industrial materials; and computer-aided drafting systems.

In addition, a generous portion of the class time will be devoted to actual drawing projects and to the solution of simulated drafting room problems.

Drawing projects will be based on actual problems encountered in the electronics industry. Examples of classroom projects will be assembly drawings; redesign, design layout, and many other detail drawings.

Students will have available to them completely equipped classrooms containing the latest in adjustable drafting tables, drafting machines, micro film equipment, and other related drafting devices.

Tuition and Fees (500 Hours)

Tuition	$625.00
Incidental Fee	55.00
Registration Fee	15.00
Total	$695.00